UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,194	11/25/2003	Maria Adamczyk	9400-50	6752

39072 7590 09/22/2008

MYERS BIGEL SIBLEY & SAJOVEC, P.A.
P.O. BOX 37428
RALEIGH, NC 27627

EXAMINER	
BOKHARI, SYED M	
ART UNIT	PAPER NUMBER
2616	
MAIL DATE	DELIVERY MODE
09/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,194	ADAMCZYK ET AL.	
	Examiner	Art Unit	
	SYED BOKHARI	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06/19/2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11,19-33,41-45 and 47-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,19-33,41-45 and 47-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant amendment filed on June 19th, 2008 has been entered. Claims 1, 3, 19, 21, 23, 25, 41, 43, 45 and 47 have been amended. Claims 52-57 have been added. Claims 1-11, 19-33, 41-45 and 47-57 are still pending in the application.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 45, 47-51 and 56-57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 45, the claimed invention is not directed to a process, machine, manufacture, or composition of matter, or any new or useful improvement thereof. The claim is drawn to "computer program product" where no physical connection to the computer exits. There must be some connection between the computer program instructions and the physical device executing the instruction through a computer-readable medium that meets the statutory requirements as set forth in the guide in MPEP 2106.01 [R6].

Regarding claim 47, the claimed invention is not directed to a process, machine, manufacture, or composition of matter, or any new or useful improvement thereof. The

claim is drawn to “computer program product” where no physical connection to the computer exits. There must be some connection between the computer program instructions and the physical device executing the instruction through a computer-readable medium that meets the statutory requirements as set forth in the guide in MPEP 2106.01 [R6].

Regarding claim 56, the claimed invention is not directed to a process, machine, manufacture, or composition of matter, or any new or useful improvement thereof. The claim is drawn to “computer program product” where no physical connection to the computer exits. There must be some connection between the computer program instructions and the physical device executing the instruction through a computer-readable medium that meets the statutory requirements as set forth in the guide in MPEP 2106.01 [R6].

. Regarding claim 57, the claimed invention is not directed to a process, machine, manufacture, or composition of matter, or any new or useful improvement thereof. The claim is drawn to “computer program product” where no physical connection to the computer exits. There must be some connection between the computer program instructions and the physical device executing the instruction through a computer-readable medium that meets the statutory requirements as set forth in the guide in MPEP 2106.01 [R6].

Claims 48, 50-51 and 49 are rejected as they are dependent to claim 45 and 47 respectively.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 19, 23, 41, 45 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Dravida et al. (US 2002/0105965 A1).

Dravida et al. disclose a communication network for broadband system having routing identification based switching with the following features: regarding claim 1, a method of operating a data network between a routing gateway for a subscriber and a data service provider providing a data service wherein the routing gateway is at a customer premises remote from the data network, the method comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119" recited in paragraph 0090 lines 1-7), receiving at the data network from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-

point data links between intelligent network elements in broadband bidirectional access system, see “providing access network a routing identification (RID) of each network element” recited in paragraph 0099 lines 1-27), data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “QoS bits are used to prioritize traffic” recited in paragraph 0093 lines 1-8 and paragraph 0167 lines 1-7) and responsive to receiving at the data network the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service, saving the data flow characteristics of the data service for the routing gateway at the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS” recited in paragraph 0261 lines 1-11) and forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12); regarding claim 19, a method

of operating a routing gateway providing subscriber use of a data service provided by a data service provider over a data network wherein the routing gateway is at a customer premises remote from the data network the method comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7), receiving data flow characteristics of the data service from the data network for a session of the routing gateway using the data service provided by the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “providing access network a routing identification (RID) of each network element” recited in paragraph 0099 lines 1-27), wherein the data flow characteristics are received at the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “QoS bits are used to prioritize traffic” recited in paragraph 0093 lines 1-8 and paragraph 0167 lines 1-7) and providing access from the routing gateway at the customer premises to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (Fig. 3, illustrates a network configuration o intelligent network

elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS” recited in paragraph 0261 lines 1-11); regarding claim 23, a data network providing a data connection between a routing gateway for a subscriber and a data service provider providing a data service wherein the routing gateway is at a customer premises remote from the data network the data network comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7); first transceiver at the data network configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “providing access network a routing identification (RID) of each network element” recited in paragraph 0099 lines 1-27), data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “QoS bits are used to prioritize traffic” recited in paragraph 0093 lines 1-8 and

paragraph 0167 lines 1-7) and a memory configured to save the data flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS" recited in paragraph 0261 lines 1-11) and a second transceiver at the data network configured to forward the data flow characteristics of the data service to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises" recited in paragraph 0308 lines 1-12); regarding claim 41, a routing gateway providing subscriber use of a data service provided by a data service provider over a data network wherein the routing gateway is at a customer premises remote from the data network the routing gateway comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119" recited in

paragraph 0090 lines 1-7), a transceiver configured to receive data flow characteristics of the data service from the data network for a session of the routing gateway using the data service provided by the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "providing access network a routing identification (RID) of each network element" recited in paragraph 0099 lines 1-27), wherein the transceiver is at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "QoS bits are used to prioritize traffic" recited in paragraph 0093 lines 1-8 and paragraph 0167 lines 1-7) and configured to provide access to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS" recited in paragraph 0261 lines 1-11); regarding claim 45, a computer program product configured to operate a data network between a routing gateway for a subscriber and a data service provider providing a data service wherein the routing gateway is at a customer premises remote from the data network the computer program product comprising a computer useable storage medium having

computer-readable program code embodied in the medium the computer-readable program code comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7 and paragraph 0426 lines 1-12), computer-readable program code that is configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “providing access network a routing identification (RID) of each network element” recited in paragraph 0099 lines 1-27), data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “QoS bits are used to prioritize traffic” recited in paragraph 0093 lines 1-8 and paragraph 0167 lines 1-7), computer-readable program code that is configured to save the data flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service (Fig. 3, illustrates a network configuration o intelligent network elements for

providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the network interface nit (NIU) stores in the register the values of the most recent flow control flags it has received from SAS” recited in paragraph 0261 lines 1-11) and computer-readable program code that is configured to forward the data flow characteristics of the data service to the routing gateway (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises” recited in paragraph 0308 lines 1-12); regarding claim 47, a computer program product configured to operate a routing gateway providing subscriber use of a data service provided by a data service provider over a data network wherein the routing gateway is at a customer premises remote from the data network the computer program product comprising a computer useable storage medium having computer-readable program code embodied in the medium the computer-readable program code comprising (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see “the intelligent network elements include optical node 112, network interface unit 119 and a standard residential gateway 30 connected to the NUI 119” recited in paragraph 0090 lines 1-7 and paragraph 0426 lines 1-12), computer-readable program code that is configured to receive data flow characteristics of the data service from the data network for a session of the routing gateway using the data service provided by the

data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "QoS bits are used to prioritize traffic" recited in paragraph 0093 lines 1-8 and paragraph 0167 lines 1-7), wherein the data flow characteristics are received at the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "QoS bits are used to prioritize traffic" recited in paragraph 0093 lines 1-8 and paragraph 0167 lines 1-7), and computer-readable program-code that is configured to provide access from the routing gateway at the customer premises to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises" recited in paragraph 0308 lines 1-12);

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5-9, 22, 27-31, 44 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Kamentani (US 2002/0003803 A1).

Dravida et al. disclose the claimed limitations as described in paragraph 3 above. Dravida et al. do not disclose the following features: regarding claim 5, wherein saving the data flow characteristics at the data network comprises creating an application flow

control record for the routing gateway; regarding claim 6, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network; regarding claim 7, wherein the first database is associated with a concentrator and the second database is associated with a service manager; regarding claim 8, wherein receiving is preceded by: receiving a request from the routing gateway for a session using the data service provided by the data service provider and forwarding the request from the routing gateway to the data service provider; regarding claim 9, providing an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider; regarding claim 22, wherein receiving is preceded by and transmitting a request to the data service provider for a session using the data service provided by the data service provider; regarding claim 27, wherein the memory is further configured to save the data flow characteristics at the data network as an application flow control record for the routing gateway; regarding claim 28, wherein the memory is further configured to save the data flow characteristics at first and second databases within the data network; regarding claim 29, wherein the first database is associated with a concentrator and the second database is associated with a service manager; regarding claim 30, wherein the second transceiver is further configured to receive a request from the routing gateway for a session using the data service provided by the data service provider and the data flow characteristics of the data service for a session of the routing gateway after forwarding the request from the routing gateway; regarding claim 31,

wherein the first and second transceivers are further configured to provide an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider; regarding claim 44, wherein the transceiver is further configured to transmit a request to the data service provider for a session using the data service provided by the data service provider and after receiving the data flow characteristics; regarding claim 50, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network and regarding claim 51, wherein the first database is associated with a concentrator and the second database is associated with a service manager.

Kametani discloses communication system for the exchange of data between the user terminals and the plurality of service providers with the following features: regarding claim 5, wherein saving the data flow characteristics at the data network comprises creating an application flow control record for the routing gateway (Fig. 1, architecture of the data network, see "servers connected to IP network record information about the user and the service provider and information about the services" recited in paragraph 0035 lines 1-2 and paragraph 0036 lines 1-8); regarding claim 6, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network (Fig. 1, architecture of the data network, see "servers record information about the users and plurality of service provides" recited in paragraph 0030 lines 1-9, paragraph 0043 lines

1-6 and paragraph 0044 lines 1-3); regarding claim 7, wherein the first database is associated with a concentrator and the second database is associated with a service manager (Fig. 1, architecture of the data network, see "sending the converted packet data to the user terminal and storing and managing account information" recited in paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3); regarding claim 8, wherein receiving is preceded by: receiving a request from the routing gateway for a session using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the end user 14 accesses the IP network1 through the terminal 7 and access gateway 2 to service provider for service" recited in paragraph 0068 lines 1-4) and forwarding the request from the routing gateway to the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the terminal 7 forward the request through the gateway 2 to the service provider" recited in paragraph 0071 lines 1-17); regarding claim 9, providing an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "when information about packet data from the user matches access condition the packet is transferred to packet exchange which converts the packet data from user to packet data of protocol and format of service provider" recited in paragraph 0045 lines 1-14); regarding claim 22,

wherein receiving is preceded by (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the end user 14 accesses the IP network1 through the terminal 7 and access gateway 2 to service provider for service" recited in paragraph 0068 lines 1-4) and transmitting a request to the data service provider for a session using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the terminal 7 forward the request through the gateway 2 to the service provider" recited in paragraph 0071 lines 1-17); regarding claim 27, wherein the memory is further configured to save the data flow characteristics at the data network as an application flow control record for the routing gateway (Fig. 1, architecture of the data network, see "servers connected to IP network record information about the user and the service provider and information about the services" recited in paragraph 0035 lines 1-2 and paragraph 0036 lines 1-8); regarding claim 28, wherein the memory is further configured to save the data flow characteristics at first and second databases within the data network (Fig. 1, architecture of the data network, see "servers record information about the users and plurality of service provides" recited in paragraph 0030 lines 1-9, paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3); regarding claim 29, wherein the first database is associated with a concentrator and the second database is associated with a service manager (Fig. 1, architecture of the data network, see "servers record information about the users and plurality of service provides" recited in paragraph 0030 lines 1-9); regarding claim 30, wherein the second transceiver is further configured to receive a

request from the routing gateway for a session using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the end user 14 accesses the IP network1 through the terminal 7 and access gateway 2 to service provider for service" recited in paragraph 0068 lines 1-4) and the data flow characteristics of the data service for a session of the routing gateway after forwarding the request from the routing gateway (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the terminal 7 forward the request through the gateway 2 to the service provider" recited in paragraph 0071 lines 1-17); regarding claim 31, wherein the first and second transceivers are further configured to provide an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "when information about packet data from the user matches access condition the packet is transferred to packet exchange which converts the packet data from user to packet data of protocol and format of service provider" recited in paragraph 0045 lines 1-14); regarding claim 44, wherein the transceiver is further configured to transmit a request to the data service provider for a session using the data service provided by the data service provider (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the terminal 7 forward the

request through the gateway 2 to the service provider" recited in paragraph 0071 lines 1-17) and after receiving the data flow characteristics (Fig. 3, time sequence showing the operation of transmission of packet data from to a user terminal to a service provider side, see "the end user 14 accesses the IP network1 through the terminal 7 and access gateway 2 to service provider for service" recited in paragraph 0068 lines 1-4); regarding claim 50, wherein saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network (Fig. 1, architecture of the data network, see "servers record information about the users and plurality of service provides" recited in paragraph 0030 lines 1-9, paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3) and regarding claim 51, wherein the first database is associated with a concentrator and the second database is associated with a service manager (Fig. 1, architecture of the data network, see "sending the converted packet data to the user terminal and storing and managing account information" recited in paragraph 0043 lines 1-6 and paragraph 0044 lines 1-3).

It would have obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. by using the features, as taught by Kametani, in order to provide saving the data flow characteristics at the data network comprises creating an application flow control record for the routing gateway, saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the data network, the first database is associated with a concentrator and the second database is associated with a service manager, receiving is preceded by: receiving a request from the routing gateway for a session using the

data service provided by the data service provider and forwarding the request from the routing gateway to the data service provider, providing an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider, receiving is preceded by and transmitting a request to the data service provider for a session using the data service provided by the data service provide, the memory is further configured to save the data flow characteristics at the data network as an application flow control record for the routing gateway, the memory is further configured to save the data flow characteristics at first and second databases within the data network, the first database is associated with a concentrator and the second database is associated with a service manage, the second transceiver is further configured to receive a request from the routing gateway for a session using the data service provided by the data service provider and the data flow characteristics of the data service for a session of the routing gateway after forwarding the request from the routing gateway, the first and second transceivers are further configured to provide an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider, the transceiver is further configured to transmit a request to the data service provider for a session using the data service provided by the data service provider and after receiving the data flow characteristics, saving the data flow characteristics comprises saving the data flow characteristics at first and second databases within the

data network and the first database is associated with a concentrator and the second database is associated with a service manager. The motivation of using these functions is to enhance the system in a cost effective manner.

8. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Kametani (US 2002/0003803 A1) as applied to claim1, 3, 19, 23 and 41 above, and further in view of Jeong et al. (USP 6,795,443 B1).

Dravida et al. and Kametani disclose the claimed limitations as described in paragraph 3 and 7 above. Dravida et al. and Kametani do not disclose the following features: regarding claim 2, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification; regarding claim 20, wherein the routing gateway is coupled to the data network via a digital subscriber line; regarding claim 24, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification; regarding claim 42, wherein the transceiver is coupled to the data network via a digital subscriber line,

Jeong et al. disclose a communication system for providing IP level connectivity between internet access terminals using service gateway with the following features: regarding claim 2, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see

"network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40) and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 2, service providing procedure for establishing an IP level connectivity, see "a terminal identifier is required for a service gateway" recited in column 8 lines 63-67); regarding claim 20, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40); regarding claim 24, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40) and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 2, service providing procedure for establishing an IP level connectivity, see "a terminal identifier is required for a service gateway" recited in column 8 lines 63-67); regarding claim 42, wherein the transceiver is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40);

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Kametani by using the features, as taught by, Jeong et al. in order to provide the routing gateway is coupled to the data

network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification. The motivation of using these functions is to enhance the system in a cost effective manner.

9. Claims 3, 10-11, 21, 25, 32-33, 43 and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Kamentani (US 2002/0003803 A1) as applied to claim1, 19, 23, 41, 45 and 47 above, further in view of Menditto et al. (USP 6,981,029 B1).

Dravida et al. and Kametani disclose the claimed limitations as described in paragraph 3 above. Dravida et al. and Kametani do not disclose the following features: regarding claim 3, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority characterization for the data service, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 10, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider and terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider; regarding claim 11, before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow

characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request; regarding claim 21, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service and a priority characterization for the data service and wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 25, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service and a priority characterization for the data service and wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 32, wherein the memory is further configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider, and wherein the first and second transceivers are further configured to terminate the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider; regarding claim 33, wherein the first transceiver is further configured to receive a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, and wherein the memory is further configured to delete the data flow characteristics responsive to receiving the request to delete the data flow

characteristics; regarding claim 43, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service and a priority characterization for the data service and wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 48, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority characterization for the data service, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network; regarding claim 49, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority characterization for the data service, wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network.

Menditto et al. disclose an information service provider network includes a content gateway to process requests for information from the client terminal with the following features: regarding claim 3, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see “the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service” recited in column 14 lines 40-48) and a priority

characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 controls different traffic policies of priority characterization for the data service” recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see “content gateway 18 dynamically modified the packet received with the quality of service value according to the content policy before the packet is forwarded to the identified server” recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 consults the content gateway directory and routes the request to specified server” recited in column 4 lines 48-56); regarding claim 10, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “removing the information of latest recently used connection” recited in column 11 lines 50-56) and terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “terminating the connection with the client terminal ” recited in column 10 lines 57-59); regarding claim 11, before deleting the data flow characteristics, receiving a request from the data service provider

to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request (Fig. 2, a the process of routing information in the internet service provider network, see "when request is received removes the information of latest recently used connection " recited in column 11 lines 50-56) ; regarding claim 21, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see "the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service" recited in column 14 lines 40-48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 controls different traffic policies of priority characterization for the data service" recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see "content gateway 18 dynamically modified the packet received with the quality of service value according to the content policy before the packet is forwarded to the identified server" recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 consults the content gateway directory and routes the request to specified server" recited in column 4 lines 48-56); regarding claim 25, wherein the data flow characteristics of the data service

include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see “the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service” recited in column 14 lines 40-48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 controls different traffic policies of priority characterization for the data service” recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see “content gateway 18 dynamically modified the packet received with the quality of service value according to the content policy before the packet is forwarded to the identified server” recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see “content gateway 18 consults the content gateway directory and routes the request to specified server” recited in column 4 lines 48-56); regarding claim 32, wherein the memory is further configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see “removing the information of latest recently used connection” recited in column 11 lines 50-56) and wherein the first and second transceivers are further configured to terminate the interconnection between the routing

gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider (Fig. 2, a the process of routing information in the internet service provider network, see "terminating the connection with the client terminal " recited in column 10 lines 57-59); regarding claim 33, wherein the first transceiver is further configured to receive a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, and wherein the memory is further configured to delete the data flow characteristics responsive to receiving the request to delete the data flow characteristics (Fig. 2, a the process of routing information in the internet service provider network, see "when request is received removes the information of latest recently used connection " recited in column 11 lines 50-56); regarding claim 43, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see "the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service" recited in column 14 lines 40-48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 controls different traffic policies of priority characterization for the data service" recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see "content gateway 18 dynamically modified the packet received with the quality of service

value according to the content policy before the packet is forwarded to the identified server" recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 consults the content gateway directory and routes the request to specified server" recited in column 4 lines 48-56); regarding claim 48, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see "the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service" recited in column 14 lines 40-48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 controls different traffic policies of priority characterization for the data service" recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see "content gateway 18 dynamically modified the packet received with the quality of service value according to the content policy before the packet is forwarded to the identified server" recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 consults the content gateway directory and routes the request to specified server" recited in column 4 lines 48-56);

regarding claim 49, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (Fig. 8, billing model within the multiple information service provider network, see "the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service" recited in column 14 lines 40-48), a priority characterization for the data service (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 controls different traffic policies of priority characterization for the data service" recited in column 4 lines 57-64), wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see "content gateway 18 dynamically modified the packet received with the quality of service value according to the content policy before the packet is forwarded to the identified server" recited in column 14 lines 29-40) and the priority characterization to the routing gateway at the customer premises remote from the data network (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 consults the content gateway directory and routes the request to specified server" recited in column 4 lines 48-56);

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Kametani by using the features, as taught by, Menditto et al. in order to provide the data flow characteristics of the data service include a bandwidth characterization for the data service, a priority characterization for the data service, wherein forwarding the data flow characteristic to

the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider and terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider, before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request, the data flow characteristics of the data service include a bandwidth characterization for the data service and a priority characterization for the data service and wherein forwarding the data flow characteristic to the routing gateway includes forwarding the bandwidth characterization and the priority characterization to the routing gateway at the customer premises remote from the data network. The motivation of using these functions is to enhance the system in a cost effective manner.

10. Claims 4 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Kametani (US 2002/0003803 A1) as applied to claims 1 and 19 above, and further in view of Nassar (US 2004/0004968 A1).

Dravida et al. and Kametani disclose the claimed limitations as described in paragraph 3 above. Dravida et al. and Kametani do not disclose the following features: regarding claim 4, wherein receiving further includes receiving an authorization code for the data service, the method further comprising and before saving the data flow characteristics, validating the authorization code and regarding claim 26, wherein the first transceiver is further configured to receive an authorization code for the data service, and wherein the memory is further configured to validate the authorization code before saving the data flow characteristics.

Nassar discloses a communication system for dynamic simultaneous connection to multiple service providers with the following features: regarding claim 4, wherein receiving further includes receiving an authorization code for the data service, the method further comprising (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see "the security server 155 to authenticate and authorize the subscriber 100" recited in paragraph 0030 lines 11-17) and before saving the data flow characteristics, validating the authorization code (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see "security server 155 sends a message identifying the subscriber 100" recited in paragraph 0030 lines 17-20) and regarding claim 26, wherein the first transceiver is further configured to receive an authorization code for the data service (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see "the security server 155 to authenticate and

authorize the subscriber 100" recited in paragraph 0030 lines 11-17) and wherein the memory is further configured to validate the authorization code before saving the data flow characteristics (Fig. 1, network architecture illustrating the interconnection between two or more service providers and a subscriber during a packet session, see "security server 155 sends a message identifying the subscriber 100" recited in paragraph 0030 lines 17-20).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Kametani by using the features, as taught by, Nassar in order to provide , wherein receiving further includes receiving an authorization code for the data service, the method further comprising and before saving the data flow characteristics, validating the authorization code and the first transceiver is further configured to receive an authorization code for the data service, and wherein the memory is further configured to validate the authorization code before saving the data flow characteristics. The motivation of using these functions is to enhance the system in a cost effective manner.

11. Claims 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0105965 A1) in view of Kametani (US 2002/0003803 A1) and Jeong et al. (USP 6,795,443 B1) as applied to claims 1, 3, 19, 21, 23, 25, 41, 43, 45, 48, 47 and 49 above, and further in view of Menditto et al. (USP 6,981,029 B1).

Dravida et al. and Kametani disclose the claimed limitations as described in paragraph 3 and 9 above. Dravida et al. also disclose the following features: regarding claim 52, forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises" recited in paragraph 0308 lines 1-12); regarding claim 54, forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises" recited in paragraph 0308 lines 1-12); regarding claim 56, forwarding the data flow characteristics of the data service from the data network to the routing gateway at the customer premises remote from the data network (Fig. 3, illustrates a network configuration o intelligent network elements for providing point-to-point data links between intelligent network elements in broadband bidirectional access system, see "a call agent 140 in the service provider network forward data flow characteristics to residential gateway that resides on the customer premises" recited in paragraph 0308 lines 1-12);

Jeong et al. disclose the following features: regarding claim 52, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40); regarding claim 53, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40); regarding claim 54, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40); regarding claim 55, wherein the routing gateway is coupled to the data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40); regarding claim 56, wherein the routing gateway is coupled to the data network via a digital subscriber line and wherein the identification of the routing gateway comprises a digital subscriber line identification (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40); regarding claim 57, wherein the routing gateway is coupled to the

data network via a digital subscriber line (Fig. 1, network architecture for establishing IP connectivity, see "network comprises a source terminal A10, a target terminal B70 and a digital subscriber line" recited in column 4 lines 36-40).

Dravida et al., Kametani and Jeong et al. do not disclose the following features: regarding claim 53, wherein receiving the bandwidth characterization and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line; regarding claim 55, wherein receiving the bandwidth characterization and the priority characterization over the digital subscriber line and regarding claim 57, wherein receiving the bandwidth characterization and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line at the routing gateway at the customer premises remote from the data network.

Menditto et al. disclose the following features: regarding claim 53, wherein receiving the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see "the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service" recited in column 14 lines 40-48) and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 controls different traffic policies of priority characterization for the data service" recited in column 4 lines 57-64); regarding

claim 55, wherein receiving the bandwidth characterization (Fig. 8, billing model within the multiple information service provider network, see "the quality of service component of content gateway 18 includes exact amount of bandwidth to be allocated for a specific class of service" recited in column 14 lines 40-48) and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line (Fig. 2, a the process of routing information in the internet service provider network, see "content gateway 18 controls different traffic policies of priority characterization for the data service" recited in column 4 lines 57-64); regarding claim 57, wherein receiving the bandwidth characterization and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line at the routing gateway at the customer premises remote from the data network.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Dravida et al. with Kametani and Jeong et al. by using the features, as by Menditto et al., in order to provide receiving the bandwidth characterization and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line and receiving the bandwidth characterization and the priority characterization comprises receiving the bandwidth characterization and the priority characterization over the digital subscriber line at the routing gateway at the customer premises remote from the data network. The motivation of using these functions is to enhance the system in a cost effective manner.

Response to Arguments

12. Applicant's arguments with respect to claims 1-11, 19-33, 41-45 and 47-57 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2616